Welcome to Open Access, the podcast series of the Federal Energy Regulatory Commission, or FERC. I’m Craig Cano, your host.

Our goal here is to have a conversation about FERC, what it does and how that can affect you. FERC can get very legal and very technical, so we will strive to keep it simple. FERC is an independent regulatory agency that oversees the interstate transmission of electricity, natural gas, and oil. FERC’s authority also includes review of proposals to build interstate natural gas pipelines and liquefied natural gas terminals and licensing of nonfederal hydropower projects. FERC protects the reliability of the high-voltage interstate transmission system through mandatory reliability standards and it monitors interstate energy markets to ensure that everyone in those markets is playing by the rules.

The evolution of wholesale energy markets in the United States has been a remarkable achievement. But the open, competitive, and reliable markets that we rely on today could not have come about without a major policy shift that occurred in a pair of landmark FERC rulemakings in the 1990s. The rules cracked open the monopoly hold that electric utilities and natural gas companies had on the transmission of those commodities that are so critical to not just our economy, but to everyday life. So we begin a two-part series on these decisions, Order No. 636, which, among other things, required gas pipelines to provide interstate transportation on an open access basis, and Order No. 888, which did the same thing for the interstate transmission of power.

Today on Open Access, a FERC Podcast, Mary O'Driscoll and I are sitting down with Anna Cochrane, Deputy Director of FERC’s Office of Energy Markets and Regulation, to talk about what prompted FERC in 1992 to require the separation of the natural gas commodity sales from natural gas pipeline transportation, some of the hurdles the Commission faced, and what has been the impact of Order No. 636.

Mary O'Driscoll: Thanks for joining us today, Anna. Now as I understand it, natural gas pipelines before the early 1990s not only transported natural gas but also sold it. So a producer would sell gas to a pipeline in the production area, then the pipeline would sell gas to the local distribution company like your local utility. Then the local distribution company would then sell that gas to the ultimate consumer, you and me. So today, we have a much different system in which the sellers of the commodity and transportation been separated. So can you walk us through those changes?

Anna Cochrane: Sure, Mary. Really it was is a confluence of events that prompted the Commission to reform its regulation of the natural gas industry. Today, we are blessed
with an abundance of natural gas supplies, and it is one of our most important resources for heating people's homes as well as generating electricity. It's difficult sometimes to remember that in the 1970s, we were actually concerned about running out of natural gas, and there were restrictions on its use. Many pipelines lost significant portions of their markets to other fuels or other sources of gas supply. In addition, the oil embargo created volatility in energy markets.

**O'Driscoll**: So, is this when FERC got involved?

**Cochrane**: Congress actually took the first steps to attempt to address issues in the gas industry as well as in other regulated industries. At this time, Congress and the courts were restructuring or deregulating a number of heavily controlled markets including the airline, telecommunication, trucking, and rail industries. These efforts introduced competition with the goal of improving efficiencies and spurring innovation. Congress enacted the Natural Gas Policy Act of 1978 to address interstate natural gas supply shortages by providing federal price incentives to spur production and by integrating the interstate and intrastate markets.

**O'Driscoll**: And was that successful?

**Cochrane**: Well, these changes achieve the intended result of improving production, but the price incentives resulted in above-market prices. Many pipelines had already signed agreements with producers to purchase large quantities of gas under so-called take-or-pay contracts and now they had to pay above market prices. The long-term take-or-pay contracts required the pipelines to pay producers for the gas supply even if the pipelines did not need the gas to serve their customers. And, the pipelines were allowed to flow through the actual cost of their supplies to their local distribution company customers, many of whom were captive customers, meaning they did not have any alternatives.

**Craig Cano**: Anna, exactly what did FERC do?

**Cochrane**: The Commission took a series of incremental actions intended to give the pipelines’ captive customers access to other sources of supply, to give sellers access to other markets, and to introduce competition into the pipeline industry. First, in 1985, the commission issued Order No. 436, which provided a framework for interstate pipelines to offer transportation service on an open-access basis so that their local distribution company customers could buy gas directly from producers and have the pipeline transport it to their city gate. Prior to Order 436, every transportation agreement had to be individually submitted to the Commission for approval. After 436, transactions were self-implementing, so long as they were reported to the Commission. Pipelines were provided the opportunity to offer new services and price them flexibly in order to meet competition and improve their throughput.

The result was that local distribution companies can more easily buy natural gas directly from producers. New entities came on the scene – natural gas marketers – and a
vibrant spot market developed. This, however, only got the industry so far. The Commission had not yet address the growing take-or-pay problem and producers argued that they were not able to compete fairly with the pipelines’ bundled sales function.

O’Driscoll: OK, so I see where this is going. So this created two distinct markets: one for the spot market dominated by non-pipeline suppliers and then one for the firm supplies dominated by pipelines. So what was it that finally prompted FERC to go in the direction of the major rule like Order 636?

Cochrane: Well, the time was right to make the natural gas transportation system more efficient. And the Commission needed to tackle the problem that the pipelines were saddled with high-cost and long-term supply contracts but could not recover all those costs from their customers especially now since their customers had other alternatives.

The Commission encouraged the pipelines and producers to enter into settlement agreements to buy out or buy down the take-or-pay contracts, and the pipelines were provided an opportunity to recover the settlement payments from their customers.

Cano: So Order 636 came after that?

Cochrane: No, there were a few other fixes that Congress and the commission made before the commission issued Order 636. A key piece of legislation was the Wellhead Decontrol Act of 1989, which removed all regulation of first sales of gas. In other words, the Wellhead Decontrol Act removed the high natural gas prices that had been put in place in 1978 to incentivize production. And, as part of that law, Congress directed FERC to regulate pipeline capacity to, quote, “maximize the benefits” of decontrol.

The Commission issued a few more rules that, while helping to fix individual instances of problems in the market, did not change the basic bifurcated nature of the gas market. And that was, most firm sales continued to be made by pipelines at high cost above market prices that were flowed through to captive customers, while spot sales were made by others at highly competitive prices.

O’Driscoll: OK. And so then Order 636 fixed that.

Cochrane: Yes. As we’ve discussed, prior to Order 636, pipelines sold the natural gas commodity and transportation as a bundled service. The most important element of Order 636 is that it required pipelines to unbundle, or separate, their transportation and sales services back to the wellhead. So if a pipeline wanted to continue to sell gas, it had to sell it in the production region, in competition with other suppliers, and then receive transportation on its own pipeline on the same basis as its customers. As a practical result, pipelines generally decided to leave the sales business.

Because transportation service was now separate from the sale of the gas commodity, Order 636 allowed a customer to purchase the natural gas commodity directly from a
producer and marketer, and still receive the same level of transportation service from the pipeline as the customer received when it bought the natural gas commodity from the pipeline as part of its bundled service.

O’Driscoll: Well that sounds like unbundling was a pretty big change.

Cochrane: Yes, it was. After decades of authorizing bundled sales, as the Commission moved toward opening up the pipeline industry, it became concerned that the pipeline had an incentive to favor its own merchant business over other shippers on its pipeline. In Order 636 the Commission said bundled sales cause, quote, “considerable competitive harm” to all segments of the natural gas industry, and those bundled sales amounted to a, quote, “unlawful restraint of trade.”

In other words, the Commission concluded that continuation of bundled merchant or sales service would violate the law, the Natural Gas Act. So that statement was pretty revolutionary because it meant that all interstate pipelines had to unbundle their sales and transportation services and to offer each service individually on a nondiscriminatory and non-preferential manner.

O’Driscoll: OK, so tell us some other important elements of Order 636.

Cochrane: Sure. Order 636 required pipelines to redesign their transportation rates so that the majority of fixed costs, which are those costs related to the physical pipeline facilities, would be recovered through a monthly reservation fee, with variable costs, or those costs that change based on pipeline usage, being recovered through a fee charged on the natural gas actually transported each month. This new rate design helped promote competition among natural gas suppliers.

Next to unbundling, in my opinion the most influential change made in Order 636, was the creation of the capacity release program. For the first time, a secondary market for pipeline capacity became available. This provided the pipelines’ firm customers with the opportunity to resell unused capacity to others.

O’Driscoll: OK, so Order 636 made some fundamental changes to how pipelines operated. Did the customers have any concerns about how this would work?

Cochrane: Yes. During the development of Order 636, some of the pipelines’ historical customers were concerned that they may lose some of the flexibility they were used to, as a result of unbundling. In order to address that concern, the Commission required pipelines to develop what was called a no-notice transportation service intended to retain that flexibility. Similarly, pipelines expressed concerns that they would lose the flexibility that they historically had to operate the pipeline flows during periods of stress. In response, the Commission gave pipelines the ability to issue operational flow orders, or OFOs, when necessary to ensure reliable operation of the system. Order 636 also improved transparency by requiring pipelines to set up electronic bulletin boards to provide customers with timely access to information about the availability of service, and
to provide transparency on the services the pipeline offered.

Finally, after Order 636, interstate pipelines were no longer under the obligation to have transportation rates examined by FERC every three years.

O’Driscoll: Okay, so now it's 25 years later. So what does this mean for us? Is Order 636 still important? How’s the rule held up over the years?

Cochrane: Yes, Order 636 is widely considered a success. It fostered greater competition among natural gas suppliers and pipelines in the creation of a vibrant secondary market, means that shippers now compete with pipelines. As a result, pipelines have incentives to operate more efficiently and to lower costs, which have translated into significant cost savings for customers. Increased competition among gas suppliers has also resulted in increased efficiencies in the natural gas market, lower wellhead gas prices, and reduced delivered gas prices for customers. Improved pricing and market signals also indicate areas where infrastructure is needed.

O’Driscoll: OK. Well, thanks, Anna, for joining us today and providing some perspective on the work that FERC’s done and that FERC continues to do.

Cochrane: You’re welcome.

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